



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

SEATTLE, WASHINGTON 98101

12/22/86

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REPLY TO  
ATTN OF:

M/S 513

**MEMORANDUM**

**SUBJECT:** Marine Power

**FROM:** Richard B. Parkin, Chief  
Water Compliance Section

*Rick*

**TO:** William Schmidt, Chief  
Field Operations and Technical Support Branch M/S 329

Pursuant to discussions with you and your staff on December 16, I am requesting that you conduct a field investigation of Marine Power's Duwamish and Lake Union sites to assist us in determining the need for and advisability of removal of waste material in the vicinity of these sites. The goals of this investigation should include the following:

I. Estimate the waste quantities at each site by establishing the areal boundaries and depth of contaminant accumulations, focusing on such subareas (e.g., along the Duwamish site's synchro lift) as may appear to have volumetrically significant deposits.

II. Characterize the chemical content of the "whole sample" and "nonsettleable fraction" of bottom samples from the contaminated area.

III. Compare the density and diversity of the biological community in impacted areas to adjacent "control" areas.

IV. Conduct chronic bioassays on the whole samples and nonsettleable fractions collected for II. above.

V. Determine the dredging history and both current and probable future flow/dispersal patterns to establish whether and for how long the waste material will remain in place and whether "capping" is a feasible alternative to removal.

We would greatly appreciate the input of ESD technical staff for specific study design such as number of samples, chemicals to be measured, species to be tested, etc..

As indicated by Dave Heineck, there are good reasons to complete this study in the next few months. We suggest a phased approach with interim reports to maximize the data available in the short term (i.e., by February or early March). Grover or I will be happy to discuss the project design with you at any time.

cc: Mike Johnson  
Dave Heineck

*Need to have M. Watson  
J. Cammarino  
& K. H. H. H.*

USEPA SF



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